

ABSTRACT OF THE DISCLOSURE

In order to suitably intercommunicate an output signal from a sensor arranged outside an actuator with a higher-order control system, an output from a contact sensor at an arbitrary position on a robot is entered to a nearest actuator device in that a wiring route is the shortest (or joint driving is not interfered therewith). Then, in the actuator device, the output of the outside sensor is processed to remove noise and sensor information is computed, and the processed results are bus-transmitted to the higher-order control system together with a drive-control signal of the actuator and sensor information from sensors housed in the actuator.